

REMARKS

Claims 1-32 are pending. Claims 1, 5-10, 14-19, 23-24, 26-28 and 32 are amended herein. No new matter is added as a result of the claim amendments.

103 Rejections

Claims 1-4, 6-13, 15-22 and 24-31

The instant Office Action states that Claims 1-4, 6-13, 15-22 and 24-31 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Manzak and Chakrabarti ("Manzak," *Variable Voltage Task Scheduling for Minimizing Energy or Minimizing Power*) in view of McFadden et al. ("McFadden," U.S. Patent No. 6,614,804). The Applicants have reviewed the cited references and respectfully submit that the embodiments of the present invention recited in Claims 1-4, 6-13, 15-22 and 24-31 are not shown or suggested by Manzak and McFadden, alone or in combination.

Applicants respectfully submit that Manzak does not address generating a schedule for executing tasks where the schedule accounts for precedence constraints, and in particular precedence constraints that fix the order in which at least some of the tasks can be executed. While Manzak does describe assigning a scheduling priority for each task, the scheduling priority is not determined using precedence constraints (see the third complete paragraph in the first column on page 3241 of Manzak). Also, according to Manzak, the scheduling priority does not establish the order in which tasks are completed.

Thus, Applicants respectfully submit that Manzak does not show or suggest generating an execution schedule using precedence constraints that fix the order in which at least some of the tasks can be executed. This point

is emphasized by the fact that Manzak only addresses the execution of independent tasks (see at least the last paragraph in the first column on page 3240 of Manzak). Manzak does not describe tasks that are dependent on the completion of other tasks. Independent tasks are inherently not subject to precedence constraints.

Therefore, Applicants respectfully submit that Manzak does not show or suggest “generating an execution schedule for decoding said encoded data stream, wherein said execution schedule comprises a sequence for executing at said client device said plurality of tasks according to precedence constraints that fix the order for executing at least a subset of said tasks” as recited in independent Claims 1, 10 and 19, nor does Manzak show or suggest “receiving said encoded data stream, wherein said encoded data stream is non-preemptable and subject to precedence constraints that fix the order for executing at least a subset of said tasks” as recited in independent Claim 28.

Applicants also respectfully submit that McFadden does not overcome the shortcomings of Manzak. Specifically, Applicants respectfully submit that McFadden, alone or in combination with Manzak, does not show or suggest the claim limitations cited above.

In summary, Applicants respectfully submit that Manzak and McFadden, alone or in combination, do not show or suggest the embodiments of the present claimed invention recited by independent Claims 1, 10, 19 and 28. Accordingly, Applicants respectfully submit that the basis for rejecting Claims 1, 10, 19 and 28 under 35 U.S.C. § 103(a) is traversed, and that these claims are in condition for allowance. Because Claims 2-4, 6-9, 11-13, 15-18, 20-22, 24-27 and 29-31 depend from either

Claim 1, 10, 19 and 28 and contain additional limitations, the basis for rejecting Claims 2-4, 6-9, 11-13, 15-18, 20-22, 24-27 and 29-31 under 35 U.S.C. § 103(a) is also traversed, and Claims 2-4, 6-9, 11-13, 15-18, 20-22, 24-27 and 29-31 are also in condition for allowance.

Claims 5, 14, 23 and 32

The instant Office Action states that Claims 5, 14, 23 and 32 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Manzak in view of Applicants' Admitted Prior Art (AAPA). The Applicants have reviewed the cited references and respectfully submit that the embodiments of the present invention recited in Claims 5, 14, 23 and 32 are not shown or suggested by Manzak and AAPA, alone or in combination.

Claims 5, 14, 23 and 32 are dependent on independent Claims 1, 10, 19 and 28 and recite additional limitations. Hence, by demonstrating that Manzak and AAPA (alone or in combination) do not show or suggest the embodiments of the present invention recited in Claims 1, 10, 19 and 28, it is also demonstrated that Manzak and AAPA (alone or in combination) do not show or suggest the embodiments of the present invention recited in Claims 5, 14, 23 and 32.

As presented above, Applicants respectfully submit that Manzak does not show or suggest the embodiments of the present invention recited in independent Claim 1, 10, 19 and 28. Applicants further submit that AAPA does not overcome the shortcomings of Manzak. That is, Applicants respectfully submit that AAPA, alone or in combination with Manzak, does not show or suggest "generating an execution schedule for decoding said encoded data stream, wherein said execution schedule comprises a sequence for executing at said client device said plurality of tasks according

to precedence constraints that fix the order for executing at least a subset of said tasks” as recited in independent Claims 1, 10 and 19, nor does AAPA, alone or in combination with Manzak, show or suggest “receiving said encoded data stream, wherein said encoded data stream is non-preemptable and subject to precedence constraints that fix the order for executing at least a subset of said tasks” as recited in independent Claim 28.

In summary, Applicants respectfully submit that Manzak and AAPA, alone or in combination, do not show or suggest the embodiments of the present claimed invention recited by independent Claims 1, 10, 19 and 28. Because Claims 5, 14, 23 and 32 depend from either Claim 1, 10, 19 and 28 and contain additional limitations, the basis for rejecting Claims 5, 14, 23 and 32 under 35 U.S.C. § 103(a) is also traversed, and Claims 5, 14, 23 and 32 are also in condition for allowance.

Furthermore, Applicants respectfully agree with the statement in the instant Office Action to the effect that Manzak does not teach an encoded data stream comprising an audio portion and a video portion.

Moreover, as presented above, Manzak does not show or suggest dependent tasks subject to precedence constraints. Accordingly, Applicants respectfully submit that Manzak is not pertinent to the encoding and/or decoding of video frames. In video decoding, for example, certain video decoding tasks are performed in a particular order because, in some instances, certain frames are used to decode other frames. For instance, one task (e.g., the decoding of a B-frame) can be dependent on the completion of another task (e.g., the decoding of a P-frame or I-frame). Because Manzak does not consider precedence constraints when generating

an execution schedule, Applicants respectfully submit that Manzak is unworkable when applied to scheduling video decoding tasks.

According to the instant Office Action, AAPA is cited as teaching an encoded video stream and an encoded audio stream. However, even if combined, Manzak and AAPA do not show or suggest the features of the present invention recited in Claims 5, 14, 23 and 32. Applicants respectfully submit that in order for Manzak to be applied to, for example, video data in view of AAPA, it would be necessary to modify Manzak and AAPA in a manner not shown or suggested by either Manzak or AAPA or the combination thereof.

For these additional reasons, Applicants respectfully submit that the basis for rejecting Claims 5, 14, 23 and 32 under 35 U.S.C. § 103(a) is traversed, and that Claims 5, 14, 23 and 32 are in condition for allowance.

Conclusions

In light of the above remarks, Applicants respectfully request reconsideration of the rejected claims.

Based on the arguments presented above, Applicants respectfully assert that Claims 1-32 overcome the rejections of record and, therefore, Applicants respectfully solicit allowance of these claims.

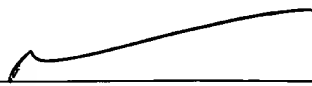
Applicants have reviewed the references cited but not relied upon. Applicants did not find these references to show or suggest the present claimed invention: U.S. Patent Nos. 6,735,629, 6,401,126 and 6,483,846.

The Examiner is invited to contact Applicants' undersigned representative if the Examiner believes such action would expedite resolution of the present Application.

Respectfully submitted,

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